STATE CAPITOL PO Box 110001 Juneau, Alaska 99811-0001 907-465-3500 fax: 907-465-3532



550 West 7th Avenue #1700 Anchorage, Alaska 99501 907-269-7450 fax: 907-269-7463 www.gov.alaska.gov Governor@alaska.gov

August 25, 2010

Mr. Michael R. Bromwich Director Bureau of Ocean Energy Management, Regulation, and Enforcement 381 Elden Street, MS 4010 Herndon, VA 20170-4817

Dear Mr. Bromwich,

I am pleased to take this opportunity to continue the State of Alaska's involvement in the decision-making process regarding energy development on the Outer Continental Shelf (OCS), as well as onshore energy development, in Alaska by offering the following suggestions and comments:

- On behalf of the State of Alaska (State), I strongly urge the Bureau of Ocean Energy
 Management, Regulation, and Enforcement to lift the moratorium on offshore drilling in
 Alaska waters. Conditions surrounding Alaskan offshore drilling differ so vastly from the
 waters of the Gulf of Mexico that categorizing and treating these two areas the same is
 unwarranted and detrimental to our mutual interests.
- I recommend we expand a cooperative effort and information exchange between the State of Alaska and the Bureau of Ocean Energy Management to further State and national goals on this subject. Alaska could contribute its invaluable oil and gas experience in the Arctic to successful development of the OCS.

There are a number of differences between drilling in Alaska's Beaufort and Chukchi Seas versus drilling in the Gulf of Mexico. Some are environmental and operational, while others are attributed to differences in climate. Drilling in an Arctic climate holds unique challenges but offers distinct advantages with respect to exploration and development compared to what is needed for deepwater offshore oil and gas plays. There are also differences between State and federal oversight and regulatory processes, as well as fundamental contrasts in the geology of the regions, all of which merit consideration while making policy decisions:

 Among the most distinguishable environmental factors are water depth, geology, and the seasonality of drilling operations. Producing Alaskan offshore fields such as Endicott, Northstar, and Oooguruk in the Beaufort Sea tap offshore reservoirs from stable, man-made gravel islands; these are in many ways akin to onshore operations.

- Beaufort Sea State waters and large parts of the federally managed OCS are very shallow, with water depths ranging approximately zero to 65 feet (zero to 20 meters). Nearly all of the historically leased acreage in the Beaufort Sea OCS planning area lies in waters inboard of the 330 feet (100 meters) depth contour and all current leases in the Chukchi Sea are in water on the order of 130-160 feet (40-50 meters) deep. Contrast this with the deepwater setting of the Gulf of Mexico, where drilling regularly taps prospects beneath waters more than 5,000 feet (1500 meters) deep.
- The significance of this water depth difference cannot be overstated. Despite the cold ocean
 water temperatures, human dive teams are able to operate directly on the seafloor in many
 places in offshore Alaska, whereas highly-specialized, remotely-operated vehicles are
 required to investigate and respond to incidents at the seabed in deepwater Gulf of Mexico
 operations.
- Many Alaskan offshore operations are seasonal, whereas Gulf of Mexico operations continue year-round. Some Alaskan exploration prospects are better drilled in the winter from bottom-founded drilling caissons or man-made ice islands, both firmly anchored to the seabed throughout the drilling season. Other Alaskan prospects are drilled from floating drill ships or jack-up rigs in the open water of late summer. These drilling projects commonly include ice-breaker support vessels to manage floes of multi-year ice that may sometimes approach the drilling well and occasionally interrupt operations by forcing the rig to move off location. This is in some ways analogous to the brief storm delays that affect offshore rigs in the Gulf of Mexico every year.
- In either winter or summer operations in the Alaska's Arctic, special stipulations are strictly
 enforced to minimize hazardous activities during the broken ice season or to avoid potential
 conflicts with marine mammal migration and Native subsistence activities.
- Finally, the geology of Beaufort and Chukchi Seas petroleum systems differs from those of the Gulf of Mexico in many important ways. Much of the Gulf of Mexico is a region marked by rapid and recent deposition of alternating sands and muddy sediments that, with deep burial and compaction, lead to strongly over-pressured pore fluids. Deep drilling in such environments is especially difficult because the high drilling mud densities required to control overpressures can fracture the formation causing catastrophic losses of drilling fluids that can trigger a blowout. The geologic setting of the Alaskan offshore is very different, marked by less recent and less voluminous sedimentation, and dangerous overpressures are not believed to be widely present.

Concerns regarding blowout prevention equipment are justified. Alaska has a long and proud record of safe oil and gas drilling. In large part, this is because of a regulatory framework based on an extensive and specialized knowledge of the Alaska drilling environment and the proactive assistance provided by regulators to explorers and developers to manage risk.

Alaska's Oil and Gas Conservation Commission (AOGCC) has extensive experience in its oversight of drilling in Alaska State waters through its regulation, permitting, and inspection of wells and

equipment. Originally an entity of the Alaska Department of Natural Resources, the AOGCC was separated out as its own independent quasi-judicial agency within the executive branch. This separation helped alleviate potential conflict between the State's revenue interests in achieving total ultimate recovery on State leases, with the equally important conservation interest of ensuring the most prudent oil field practices are routinely performed. This is similar to the division of responsibilities adopted in the reorganization of the federal Minerals Management Service (MMS) into two agencies. I believe that Alaska's regulatory framework and oversight system could provide substantial benefits at the federal level if your bureau could turn to the State of Alaska for review and advice for future drilling. We have a strong record of responsible offshore oil and gas development that demonstrates sensitivity to the environment and respect for Native culture – over more than three decades, 84 oil and gas wells have been drilled in Alaska's offshore without incident.

- A substantial part of the State's oversight efforts are created to ensure that the blowout
 prevention equipment is never needed. All other aspects of drilling have been planned
 appropriately and in a way that functions optimally in the specific drilling environment.
- The first line of prevention is drilling fluid. AOGCC's geologists review the State's database
 of geologic information to identify any potential strata penetrated by a suggested well where
 a potential flow could occur. The drilling procedure is then reviewed by an AOGCC
 engineer to ensure the planned drilling fluids are appropriate for the anticipated pressure.
- The second line of prevention is well design. The State mandates appropriate pipe sizes and setting depths, as well as cement formulas and volumes, to provide a barrier to flow from rock formations behind pipe.
- Finally, AOGCC requires confirmation that good oil field practices will be followed throughout the operation before granting any drilling permit.
- Rigs are inspected by an AOGCC inspector before being brought into service, and while in service, their blowout preventers and other safety equipment are tested every 14 days (every seven days for exploratory wells) to ensure proper performance. AOGCC inspectors personally witness about 25 percent of these tests. If a blowout preventer fails a test, drilling operations will be suspended until it passes.
- In addition, the State has oil spill prevention and response planning standards that apply to
 exploration and production activities in State waters and to federal waters throughout the
 OCS by virtue of the Alaska Coastal Management program. Those standards, administered
 by the Alaska Department of Environmental Conservation (ADEC), include requirements
 for spill prevention and response plans and resources.
- ADEC requirements reflect a response planning standard that demands that a company have plans and resources to contain and clean up a "realistic maximum oil discharge." Plans, including inventories of response equipment and personnel, are submitted by the companies and reviewed by ADEC staff.

Mr. Michael R. Bromwich August 25, 2010 Page 4

> In addition to requirements for containing and cleaning up a spill resulting from a blowout, ADEC also requires a plan for drilling a relief well or otherwise controlling the well within 15 days of blowout.

According to assessments from the U.S. Geological Survey and MMS, 50 percent of undiscovered technically recoverable oil resources and 36 percent of undiscovered natural gas resources lie offshore. The U.S. Department of Interior estimates that undeveloped reserves of the OCS represent about four times America's proven reserves of oil and natural gas. According to USDOI, 86 billion barrels of oil and 420 trillion cubic feet of natural gas lie undeveloped in the OCS; the equivalent of 50 years worth of today's Organization of the Petroleum Exporting Countries' imports.

Allowing continued exploration and development in the OCS would limit the country's reliance on foreign oil. In 2008, United States' oil imports were estimated by the U.S. Department of Energy's Energy Information Administration to average 13.47 million barrels per day. In 2009, natural gas imports totaled 106.1 billion cubic meters. This means that 58-60 percent of our oil and 16 percent of our natural gas (2009 figures) comes from foreign sources.

Increased imports will come from sources where environmental oversight is not well advanced. With these imports, we export highly technical jobs in the sciences and engineering. These are skills that our economy will need to transition to new energy sources.

Next, Alaska's resources are vast and we can help meet our nation's demand for energy.

- President Obama and the Department of the Interior Secretary Ken Salazar have acknowledged that conserving energy and developing alternative energy sources will not do enough to meet our energy needs unless we also increase oil and gas production.
 Responsible OCS development should be part of our national energy plan.
- Under even the most optimistic estimates, oil and natural gas are projected to account for 60-65 percent of domestic energy consumption in 2025.
- Increased development of domestic oil and gas resources is required to meet demand, even while the percentage of overall energy demand met by oil and gas is decreasing.
- Alaska's OCS contains an estimated 27 billion barrels of undiscovered, economically recoverable oil and 130 trillion cubic feet of undiscovered, economically recoverable natural gas. Compare this amount with the already 16 billion barrels that have been produced on Alaska's North Slope since the Trans Alaska Pipeline Systems (TAPS) went online in 1977. Counting the OCS, Alaska likely has more than 30 percent of the nation's recoverable oil and gas.

- Developing these resources will advance our national interests in three ways: creating jobs, reducing reliance on foreign oil, and improving our national security.
- Increasing oil and gas exploration and production will create well-paying jobs. According to
 a 2009 study conducted by Northern Economics, in association with the University of
 Alaska Anchorage, OCS production could provide an annual average of 35,000 jobs for 50
 years and \$72 billion in new payroll for our state. An annual average of 35,000 jobs over the
 next 50 years means a six percent increase compared to total statewide employment without
 OCS development. These jobs represent a total payroll of \$27 billion (2007) over the 50-year
 period.
- OCS-related employment growth could more than offset losses from the decline of petroleum production on State lands and could help sustain the Alaskan economy for several decades while providing a reliable domestic energy source for the country. Opportunities would be created for high-paying, long-term, year-round jobs and for seasonal, short-term jobs. Of the 6,000 oil and gas sector jobs, about 3,900 could be long-term, year-round jobs. By way of comparison, in September 2009, the oil and gas industry employed approximately 13,000 in Alaska.
- Development of the OCS will mean that royalties and tax revenues from production will go
 to our governments instead of foreign governments. OCS leases off Alaska's coast have
 already generated over \$9 billion to the federal treasury. OCS development in Alaska's
 offshore waters will aid the nation's economic recovery by jobs, government revenue, and
 cheaper energy available to assist recovery process.

One example of Alaska offshore development is BP's Liberty Project in the Beaufort Sea. Liberty is targeting what is estimated to be a 100 million barrel reserve. Liberty is not covered by the federal moratorium on offshore drilling.

The surface location of the Liberty wells is on State land and therefore within the jurisdiction of AOGCC which has committed a 24/7 inspection oversight regime for the Liberty well drilling. The technology planned for use in the Liberty project has, apart from the ultra-extended reach drilling, been tested and used in Alaska's OCS. The blow-out preventer (BOP) equipment for Liberty is on land, versus under 5,000 feet of water. Liberty oil will be processed in existing facilities at Endicott and, which will help extend the life of these facilities whose maximum throughput of 120,000 barrels a day has fallen to 13,000-14,000 barrels a day (2009).

The Endicott experience is repeated elsewhere on the North Slope and explains why the opportunities offered by developing federal oil and gas resources both on and offshore Alaska's north coast are so important. Not only is there a potential to run federal oil and gas production through existing facilities and minimize the footprint of federal development, extending the life of these facilities leverages existing production with federal production for the benefit of the nation. Oil produced on the OCS, for example, will extend the working life of the Trans Alaska Pipeline System, postpone remedial investments to run the system at low volumes, and reduce the per-barrel

Mr. Michael R. Bromwich August 25, 2010 Page 6

tariff for all production. These opportunities include not only the OCS, but also the National Petroleum Reserve-Alaska and the "1002 Area" in the Alaska National Wildlife Refuge.

Thank you for the opportunity to provide comments.

Sincerely,

Sean Parnell Governor

cc: The Honorable Larry Hartig, Commissioner, Alaska Department of Environmental Conservation

John Katz, Director of State/Federal Relations and Special Counsel, Office of the Governor